

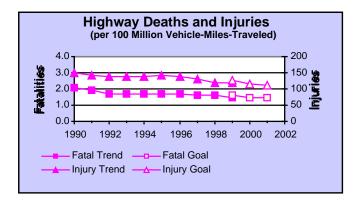
MAJOR PROGRAM PERFORMANCE

SURFACE

In surface transportation program performance, the Department was successful in reducing highway fatalities and injuries, rail fatalities and injuries and serious hazardous materials incidents. DOT also made significant improvements in bridge conditions and Amtrak ridership.

SAFETY

HIGHWAY FATALITY AND INJURY RATE



Performance Measure: Number of fatalities per 100 million vehicle miles of travel.

2001 Goal: 1.5

2000 Goal: 1.5

1999 Goal: 1.6

1999 Performance: 1.5

Performance Measure: Number of injured persons per 100 million vehicle miles of travel.

2001 Goal: 113

2000 Goal: 116

1999 Goal: 127

1999 Performance: 120

In 1999, motor vehicle crashes killed 41,345 Americans and injured over three million, taking a heavy toll on American families and costing more than \$165 billion in medical and other costs. Highway crashes cause 94 percent of all transportation-related fatalities and 99 percent of transportation injuries. They are the leading cause of death for people ages 5 through 29.

Vehicle travel is expected to grow at approximately 2.2 percent per year. In addition, the highest risk population groups — older drivers and drivers ages 15 to 24 — will grow at faster rates than the overall population. The number of younger drivers age 15 to 24 grew by 1.6 percent in 1999, nearly twice as fast as the total population. Although the number of people 70 years and older makes up nine percent of the total U.S. resident population, they comprised an

estimated 11 percent of all traffic fatalities in 1999.

Both the highway fatality and injury rate goals for calendar year (CY) 1999 were met. Fatalities and injuries per 100 million vehicle-miles-traveled (VMT) declined to record lows. This reduction in the fatality and injury rates occurred despite the fact that the economy expanded in 1999, continuing the longest economic expansion in a generation.

The number of fatalities in 1999 decreased slightly (0.3 percent). However, despite the overall decline in the number of fatalities, motorcycle fatalities increased 11 percent.

In 1999, nine agencies within the U.S. Department of Transportation combined the best injury prevention practices into the Safe Communities approach to serve as a model throughout the nation. Communities are in the best position to improve motor vehicle safety. When a community takes ownership of an issue—traffic safety or otherwise—change happens. DOT surpassed its 1999 goal of 600 Safe Communities with 730 Safe Community sites by the end of 1999.

NHTSA issued a supplemental notice of proposed rulemaking to improve the safety benefits of air bags while reducing the associated risks. This proposal continues a comprehensive set of actions NHTSA announced in 1996, including the use of advanced air bags, to improve automatic crash protection for occupants of various sizes, belted and unbelted, and to minimize the risks posed by air bags to infants, children and other occupants.

Two major evaluations were completed in 1999:

Evaluation of Federal Motor Vehicle Safety Standard (FMVSS) 214 — Side Impact Protection: Dynamic Performance Requirement found a statistical correlation between the performance measurement for side impact, the thoracic trauma index as measured on an anthropomorphic dummy (TTI (D)) and real world performance of crash-involved vehicles.

Effectiveness of Lap/Shoulder Belts in the Back Outboard Seating Positions study found that lap/shoulder belts reduce fatality risk by 44 percent relative to unrestrained back-seat occupants of passenger cars, and by 15 percent relative to lap-belted occupants. Lap/shoulder belts also reduce abdominal injuries by 52 percent and head injuries by 47 percent relative to lap belts in frontal crashes.

ALCOHOL-RELATED HIGHWAY FATALITIES



Performance Measure: Percentage of highway fatalities that are alcohol-related.

2001 Goal: 34

2000 Goal: 35

1999 Goal: 36

1999 Performance: 38

About three in every 10 Americans will be in an alcohol-related crash at some time in their lives. Alcohol-related fatalities accounted for almost 40 percent of all crashes in 1999. Alcohol is the single biggest cause of fatal crashes. The Department and its partners have a goal of reducing alcohol-related fatalities to no more than 11,000 by 2005.

The magnitude of the drinking-anddriving problem is demonstrated by 27.4 percent of college students reporting that they drink and drive. There is also growing evidence that the use of drugs, a corollary problem, by young people, is rising. Travel, population and employment changes have a large influence on traffic fatalities generally and on alcohol-related traffic fatalities in particular. If these factors increase rapidly in states, statistical models show that influencing the alcohol-related fatality rate is more difficult.

The 1999 goal to reduce the percentage of highway fatalities that are alcoholrelated to 36 percent was not met. In 1999, 15,794 people died in alcoholrelated crashes (38 percent of the total fatalities for the year), a 30 percent reduction from the 23,626 alcoholrelated fatalities in 1988 (50 percent of

the fatalities). Alcohol consumption among 16 to 20 year olds has increased every year since 1993. However, the percentage of alcohol involvement among drivers in this age group killed in crashes declined slightly in 1999 as it did throughout the 1990s.

In 1999, DOT worked with other Federal agencies, States and other organizations to reach this goal. The Transportation Equity Act for the 21st Century (TEA-21) created a new grant program (Section 163) focused on reducing the incidence of alcohol-impaired drivers by authorizing \$500 million over six years for incentive grants to States that enact and enforce laws that make it illegal to operate a motor vehicle with a blood alcohol concentration (BAC) of 0.08 percent or greater.

TEA-21 also authorized \$219.5 million over six years to continue the Section 410 alcohol-impaired driving countermeasures incentive grant program. To qualify for this grant, states must either demonstrate that they have in place certain laws or programs, such as administrative license revocation laws and graduated licensing programs, or meet certain performance criteria based on their alcohol-related fatality rates. States use Section 410 grant funds to implement and enforce alcohol-impaired driving countermeasures.

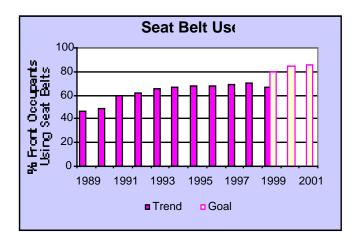
Two major evaluations were completed in 1999:

Evaluation of a Day Reporting Center (DRC) for Repeat Driving While Intoxicated (DWI) Offenders examined the effectiveness of a Day Reporting Center in Maricopa County, Arizona in reducing the DWI recidivism rate of

repeat DWI offenders. Although the DRC program was no more effective in reducing recidivism than was a comparison standard probation program, it was more cost-effective and helped reduce pressure on the county jail system.

The Relationship of Alcohol Safety Laws to Drinking Drivers in Fatal Crashes analyzed the relationships between the passage of alcohol safety laws and the proportion of drinking drivers in fatal crashes. The study compared three major alcohol safety laws — administrative license revocation laws, .10 BAC per se and .08 BAC per se — in terms of the proportion of drinking drivers in fatal crashes. The results indicate each of the three laws had a significant relationship to the downward trend in alcohol-related fatal crashes in the United States over that period. The report points out that this long-term trend is not the product of a single law, but the result of the growing impact of several laws over time plus the effect of other factors, e.g., sobriety checkpoints, media attention.

SEAT BELT USE



Performance Measure:

Percentage of front occupants using seat belts.

2001 Goal: 86

2000 Goal: 85

1999 Goal: 80

1999 Performance: 67

Over 30 percent of Americans do not use a seat belt when driving or riding in motor vehicles. Seat belts save an estimated 9,500 lives each year. If seat belt use nationwide were to increase to 90 percent, approximately 5,500 deaths and 132,600 injuries could be avoided and \$8.8 billion saved annually.

As vehicle travel increases, so does the exposure of people to motor vehicle crashes. Beginning in 1991 and increasingly every year thereafter, DOT and its partners succeeded in convincing the majority of the population to buckle up. However, the behavior of the remaining part-time seat belt users and non-users will be more difficult to change.

In 1999, the seat belt use rate was at 67 percent, below the 1999 goal. Seat belt use declined slightly between 1998 and 1999. However, this decline is not statistically significant and may be attributable to a change in the methodology for collecting data or normal sample variations, rather than a real decline in seat belt usage.

By the end of 1999, 16 states plus Puerto Rico, Washington, D.C. American Samoa, Guam, Marianas and the Virgin Islands had enacted primary belt laws.

An additional 33 states have secondary belt laws.

In 1999, NHTSA published a final rule establishing a new standard requiring manufacturers to provide motor vehicles with child restraint anchorage systems that are standardized and independent of vehicle seat belts. The agency also urged automakers to develop side airbag test procedures, using both child and adult dummies in a wide variety of positions, to avoid risking serious injury during airbag deployment.

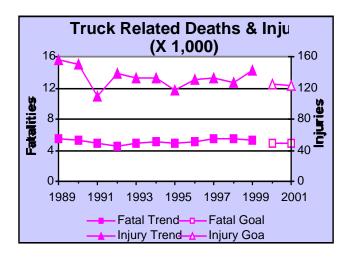
Two major evaluations were completed in 1999:

National Child Safety Seat Distribution Program Evaluation examined how eight million dollars worth of child safety seats, provided by General Motors, were distributed to families who could not otherwise obtain a child safety seat for their children. Medical facilities and community health centers were the most likely distribution programs that had prior experience and trained staff to assure that the seats were properly installed in recipients' vehicles.

Occupant Protection Special Traffic Enforcement Program Evaluation study examined 20 states that received grants to conduct special traffic enforcement programs to increase seat belt usage in their States. Over one-quarter million other citations were issued. Over 300,000 public information and education items were aired, printed or distributed to educate the public about the importance of buckling up and that their local police would give them a citation if they were not. Belt use increased an average of 5.6 percentage points in secondary law enforcement

States compared to 16.8 percentage points for primary law enforcement States.

LARGE TRUCK-RELATED FATALITIES AND INJURIES



Performance Measure: Number of fatalities involving large trucks.

2001 Goal: 4,830

2000 Goal: 4,934

1999 Goal: N/A

1999 Performance: 5,362

Performance Measure: Number of injured persons involving large trucks.

2001 Goal: 122,000

2000 Goal: 125,000

1999 Goal: N/A

1999 Performance: 142,000

In 1999, 5,362 Americans died and 142,000 were injured in traffic crashes involving large trucks. Large trucks are over-represented in fatal crashes. Of all people killed in motor vehicle incidents. 13 percent died in crashes involving a large truck. Yet trucks represent only three percent of registered vehicles and about seven percent of the vehicle miles of travel. While these numbers are unacceptably high, the fatal crash rate is the lowest it has been in decades. Fatality rates for large truck crashes dropped 33 percent and injury rates decreased 30 percent from 1988 to 1998. These rates declined even as the population of motor carriers doubled over the last decade. To focus attention on commercial vehicle safety, DOT goals in 1999 were set to reduce large truck-related fatalities 50 percent by the end of 2009 and injured persons 20 percent by the end of 2008.

Driver error due to inattention and drowsiness are major contributing factors to large truck-related traffic crashes. Deficiencies in the available crash data and knowledge about the causes of a crash limit the design and implementation of effective strategies. Federal and State agencies are able to monitor compliance and enforce Federal safety regulations in only a small portion of the motor carrier industry.

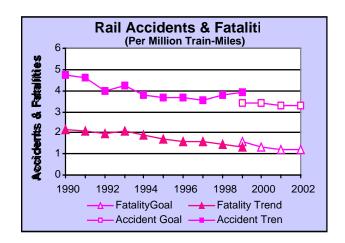
There were no goals for large trucks in the DOT Fiscal Year 1999 Performance Plan. However, the FMCSA 1999 goals of reducing fatalities to 4,988 and injuries to 126,000 were not achieved.

The FMCSA is targeting high-risk motor carriers for safety improvement. In 1999, the agency increased the number of compliance reviews for this target group.

Overall, the number of Federal compliance reviews conducted doubled between the first and fourth quarters and the total for the year increased 28 percent over 1998. Also, the number of enforcement cases processed each quarter increased. The average claim amount per case increased and the backlog of enforcement cases was nearly eliminated.

The agency's ability to identify high-risk carriers is based on complete, accurate and timely information. FMCSA is working with the States to improve the timeliness of reporting the results of roadside inspections, compliance reviews and crashes. The total number of States participating in the Performance Registration and Information Systems Management (PRISM) program increased by five during 1999. PRISM links State vehicle registration with the motor carrier's safety fitness information.

RAIL AND ACCIDENT FATALITY RATES



Performance Measure: Train accidents per million train-miles.

2000 Goal: 3.38

1999 Goal: 3.44

1999 Performance: 3.89

Performance Measure: Rail-related fatalities per million train-miles.

2001 Goal: 1.23

2000 Goal: 1.30

1999 Goal: 1.57

1999 Performance: 1.31

In 1999, 932 deaths were attributed to rail operations. Freight railroads account for 40 percent of the Nation's traffic as measured by ton-miles, and projections indicate a growth rate in freight railroad traffic of 1.4 percent per year for the foreseeable future. In addition, passenger rail service is also experiencing significant growth as more travelers are turning to commuter and intercity rail as a viable transportation alternative.

The structure of the railroad freight industry is changing dramatically, with the number of Class I railroads declining from 58 in 1976 to nine in 1999 and the number of Class II and Class III railroads increasing from 586 in 1993 to approximately 700 in 1999. Freight railroads account for 40 percent of the Nation's intercity traffic as measured by ton-miles.

The 1999 train accident rate was 3.89, a slight increase over the 1998 rate of 3.78, and above the 1999 target of 3.44. Although train accidents were higher in 1999, total train-miles increased significantly, almost four percent, over the previous year. The train-accident count and rate exclude highway-rail collisions.

While FRA is not satisfied that the train accident rate remained roughly constant from 1998, FRA is pleased at the overall success they have had over the past six years. Since 1993, this rate has dropped more than 10 percent, and FRA is confident that it can continue to meet projected targets.

Primarily, the increase in the train accident rate was attributable to accidents caused by human factors — 3.6 percent rise over 1998 — and those that were track-related — 6.1 percent rise over 1998. Part of the increase may attributable to recent rail consolidations, primarily in the western U.S.

The rail fatality rate in 1999 was 1.31, compared to FRA's goal of 1.57. If this trend continues, it will be the lowest rate in a decade. Both grade crossing and trespasser fatalities are included in this rate and, together, make up about 90 percent of all rail-related fatalities.

The work of both the Safety Assurance and Compliance Program (SACP) and the Railroad Safety Advisory Committee (RSAC) has contributed to overall rail safety improvements. In 1999, RSAC-related rulemakings included final rules for "Qualification and Certification of Locomotive Engineers," and revisions to Steam Locomotive Inspection regulations. Under traditional

rulemaking procedures, a final rule for "Passenger Equipment Safety Standards" was issued.

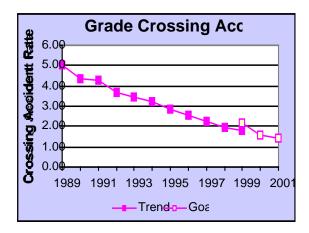
The RSAC also continued developing standards for roadway equipment machines, locomotive crash-worthiness, locomotive sanitation, positive train control systems and event-recorder-data survivability. Notices of proposed rulemaking for locomotive sanitation, locomotive crashworthiness and roadway equipment machines are expected to be issued in 2000. FRA conducted SACP examinations on all Class I railroads and many of the nation's commuter rail authorities to identify systemic safety problems. Smaller regional and local railroads underwent similar reviews.

FRA also strengthened the SACP as recommended in the Office of the Inspector General's 1998 report. It provided its safety inspectors additional guidance on methodology and documentation requirements involving SACP planning and coordination, resolution of safety issues and monitoring remedial actions taken by railroads. FRA also developed updated enforcement guidelines for its inspectors and prepared a composite listing of all systemic safety issues for prior SACP projects that included the status of each safety issue.

To counter the growing number of incidents involving human factors, FRA continued the research and development of fatigue countermeasures. Additionally, FRA has been actively encouraging all railroads to develop Fatigue Management Plans, aimed at addressing fatigue issues among railroad employees. FRA also continued its

compliance and assistance audits for drug and alcohol use on railroads, and conducted education conferences for rail labor and management on Federal drug and alcohol regulations.

HIGHWAY-RAIL GRADE CROSSING ACCIDENTS



Performance Measure: Number of grade crossing accidents divided by the product of million train-miles and trillion vehicle-miles-traveled.

2001 Goal: 1.39

2000 Goal: 1.57

1999 Goal: 2.19

1999 Performance: 1.83

In 1999, 932 deaths were attributed to rail operations. Over 43 percent of these fatalities were caused by collisions between automobiles or trucks and trains. Every day, people attempt to beat a train to the railroad crossing —

endangering their lives, as well as those of train crewmembers and passengers.

U.S. railroad activity is rapidly expanding and America's freight railroads are becoming increasingly congested. Since 1990, revenue tonmiles have risen by more than a third. Since 1986, the number of rail passenger miles has risen by almost 25 percent. Additionally, there are approximately 160,000 public and 100,000 private grade crossings nationwide. All of these factors increase the risk and likelihood of increased highway-rail crossing accidents.

FRA reached its 1999 goal for grade crossing accidents. The 1999 rate was 1.83 versus 1.98 in 1998. Since 1993. the rate has declined a spectacular 42 percent. Although train-miles and total vehicle-miles-traveled rose in 1999. there was also a significant drop in total grade-crossing accidents nationwide. FRA was able to improve last year's rate by lowering total accidents almost 2.4 percent, from 3,508 to 3,489 over the 11 month period.

The rail grade crossing accident rate has declined each year since 1987, with the 1999 rate being the lowest since FRA began collecting data in 1975.

With the exception of 1994, the actual number of accidents has fallen every year since 1988. During the same period, train-miles rose 12 percent and vehiclemiles climbed almost 30 percent.

Fatalities from crossing accidents dropped almost 10 percent over the prior year, from 404 to 367. Of the 3,138 crossing accidents in 1999, almost onethird occurred in just five States —

California, Illinois, Indiana, Louisiana and Texas. Those same five States accounted for 42 percent of the fatalities resulting from crossing accidents and 36 percent of the injuries.

Activities in 1999 that contributed to FRA's successful results include the work of the SACP, which provides the overall umbrella for a healthy partnership with the rail industry. Also, FRA forged meaningful partnerships with railroads, States and other local communities to produce effective outreach programs.

Some specific activities included:

- FRA provided its Highway-Rail Grade Crossing managers with camera-ready art, video and pamphlets for use at outreach, town hall and local law enforcement meetings to promote "Always Expect a Train."
- FRA partnered with Kentucky Operation Lifesaver, the city of Louisville, KY and the local school system to improve safety at railroad crossings, thereby receiving the Secretary's "Community Partnership Award."
- FRA provided \$600,000 for Operation Lifesaver Inc. (OLI), which represents almost 50 percent of OLI's annual budget for operations and programs. OLI is a non-profit national organization devoted to preventing and reducing crashes, injuries and fatalities and improving driver performance at the nation's 260,000 public and private highway-rail grade crossings. A portion of the funding was used to

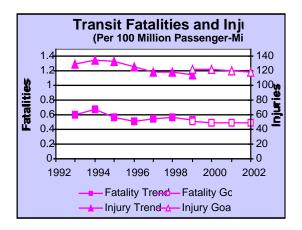
continue the highly successful "Highways and Dieways" public service campaign.

- FRA published a set of illustrative guidelines, in conjunction with the Volpe National Transportation Center in Cambridge, Mass. to show a low-cost method for improving the visibility of trains at grade crossings.
- FRA designed new "windows-based" software that is used by railroads and States free of charge to update their grade crossing inventory.
- FRA expanded the Grade Crossing Hazard Elimination Program to include eight federally designated high-speed rail corridors to eliminate hazards at public and private grade crossings.

The Office of the Inspector General completed a program review in 1999 to assess the progress made toward achieving the year 2004 goals established in the Highway-Rail Grade Crossing Safety Action Plan (no more than 2,500 crossing accidents and 300 crossing fatalities). The review concluded that DOT's efforts have been successful.

FRA will implement several of the recommendations made in the program review including focusing on strategies that have been proven effective such as installation of median barriers to prevent driving around lowered gates, use of well-advertised photo enforcement and imposition of stricter penalties to deter grade crossing violations. They are also developing a separate plan to address trespass prevention and pedestrian safety issues.

TRANSIT FATALITY AND **INJURY RATES**



Performance Measure: Transit fatalities per 100 million passenger miles traveled.

2001 Goal: .497

2000 Goal: .502

1999 Goal: .507

1999 Performance: .530

Performance Measure: Transit injured persons per 100 million passenger miles traveled.

2001 Goal: 120.7

2000 Goal: 121.9

1999 Goal: 123.2

1999 Performance: 115.0

Public transit provides a flexible alternative to automobile and highway travel, offering a higher degree of safety as well. However, public expectations

for safety are higher for transit than they are for highway travel.

As the population grows, the use of public transit can also be expected to increase. Increased ridership of public transit would lead to an increase in the absolute number of fatalities and injured persons even if the rate per 100 million passenger mile traveled does not change.

Although the 1999 goal for fatalities was not met, the fatality rate dropped from .564 per 100 million passenger miles traveled in 1998 to .530 in 1999. The goal for transit injuries was met.

Increased ridership resulting, in part, from expanding rail systems and the purchasing of more transportation provides more opportunities for mass transit accidents to occur. The major causes of transit fatalities/injuries are being investigated in the Transit Accident Casual Factor Study.

Through FTA, the Transportation Safety Institute offered 22 different safety courses at 138 training sessions throughout the United States. The 53,125 student hours completed by transit personnel in FY 1999 are a measure of the industry's acceptance of the program.

FTA provided technical assistance to States and transit operators subject to FTA's State safety oversight regulation and initiated a compliance audit program. Audits were conducted in seven States — Ohio, Florida, Tennessee, California, Texas, New York and Pennsylvania.

The 1997 Drug and Alcohol **Management Information Statistics**

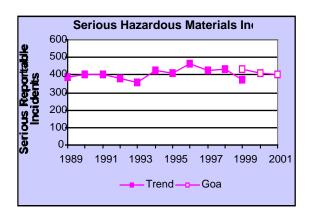
(DAMIS) annual report was published December 1998. When the program began, the testing rate was 50 percent for drugs and 25 percent for alcohol. Data developed through the DAMIS report enabled FTA to reduce the alcohol testing rate to 10 percent. The rate of positive random drug tests has not declined significantly. Consequently, the drug-testing random rate is being continued at 50 percent.

Six security audits were conducted on a voluntary basis at rail/bus systems throughout the country and 10 security audits were conducted at bus-only systems. The audit program is advisory only. However, most systems have acknowledged the technical expertise of FTA's audit consultants and have adopted the recommendations resulting from the audit.

The Safety and Security Website continued to provide access to timely and substantive information to the industry and interested members of the public.

The joint FTA/FRA "Policy on Shared Use of the General Rail System," developed in concert with the Office of the Chief Counsel, was published in the Federal Register on May 25, 1999. The purpose of the joint policy is to ensure that grantees know whether their projects are under FTA or FRA's jurisdiction. FTA's companion document, "Statement of Agency Policy," was published in the Federal Register on November 1, 1999. FTA and FRA plan outreach meetings with involved parties — the respective DOT field offices, grantees and the American **Public Transportation Association** (APTA).

HAZARDOUS MATERIAL INCIDENTS



Performance Measure: Number of serious hazardous materials incidents in transportation.

2001 Goal: 401

2000 Goal: 411

1999 Goal: 430

1999 Performance: 372

Many of the materials used in manufacturing and many of the retail products people buy include hazardous materials (HAZMAT). There are over 800,000 shipments of hazardous materials each day in the U.S. These range from flammable materials and explosives to poisons and corrosives. Release of these materials during transportation could result in serious injury or death, or harm to the environment.

The vast majority of hazmat transportation incidents are caused by human error.

Serious hazardous materials incidents declined from 431 in 1998 to 372 in 1999, surpassing the 1999 goal.

The number of serious hazardous materials incidents is not normalized to the number of hazardous materials shipments. RSPA estimates that in 1999, there were over 800,000 hazardous materials shipments per day. Industry appears to be placing increased focus on safety improvements, encompassing improved packaging as well as operational and response procedures. The drop in package failure incidents may partially reflect that effort, and suggests at least one aspect of system risk reduction. Further conclusions are difficult to draw, however, and DOT continues to aggressively address risk reduction throughout the system.

In 1999, RSPA evaluated the usefulness of hazardous materials incident reports in identifying the causes of hazardous materials incidents. This study was coordinated with industry and Hazardous Materials Information System (HMIS) users. The results have been incorporated into an Advance Notice of Proposed Rulemaking to consider revisions to the incident reporting requirements and the detailed hazardous materials incident report form.

A Management Challenge was established to implement the findings of the DOT-wide Hazardous Materials Program Evaluation.

Ensuring the safe transportation of hazardous materials presents a management challenge to DOT. This is because the administration of a complex national safety program requires the best that high-performance organizations can

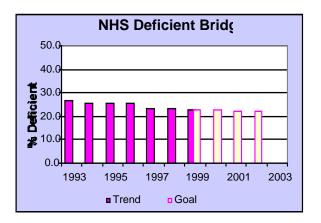
offer. Program delivery is complicated because shipments of hazardous materials frequently span modal lines of responsibility and their transportation chain can be intricate. Matters can be made better or worse by the actions of the manufacturer or shipper at the origin, where classification, packaging and marking can be more influential on safety than the actions of any subsequent party.

Recognizing the need for systems-based analysis and action, DOT initiated a Department-wide Hazardous Materials Program Evaluation (HMPE) in 1999. Conducted by a ONE-DOT team from the OIG, RSPA, USCG, FAA, FHWA and FRA, the effort assessed DOT's hazardous materials safety program delivery, evaluated its effectiveness at each step in the transportation process and made appropriate recommendations. The evaluation findings were to improve DOT's hazardous materials programs through DOT-wide strategic planning and coordination, more focused delivery and better data.

To meet its management challenge, the program evaluation has recommended that the Secretary create a DOT-wide institutional capacity to coordinate the hazardous materials programs within DOT and implement all of the findings contained in the report. The Operating Administrations and the Bureau of Transportation Statistics will work together to improve specific program delivery and data issues following issuance of the report and adoption of the recommendations by the Secretary.

MOBILITY

HIGHWAY BRIDGE CONDITION



Performance Measure: Percentage of bridges on the NHS that are deficient.

2001 Goal: 22.3

2000 Goal: 22.5

1999 Goal: 22.8

1999 Performance: 23.0

The National Highway System (NHS) includes 128,979 bridges serving major population centers, international border crossings, intermodal transportation facilities and major travel destinations. Approximately 23 percent of these bridges are either structurally deficient or functionally obsolete — in terms of dimension, load or other characteristics. Deficient bridges impair the public's access to activities, goods and services.

Growth in the U.S. economy has translated into over two percent annual growth in vehicle miles traveled, increasing the stress on bridges. In addition, the four percent growth rate of combination truck traffic over the 1985

through 1995 period exceeded that for all types of vehicles by .7 percent. These trends directly contribute to structural and functional deterioration of our bridges.

In 1999, our goal was to reduce the number of deficient NHS bridges to 22.8 percent. According to National Bridge Institute (NBI) data for 1999, this goal was met. From 1996 to 1998 the percentage of deficient NHS bridges decreased from 25.8 percent to 23.2 percent, with a 2.4 percentage point drop between 1996 and 1997. Much of this single-year drop was due to criteria changes for bridge functionality, which resulted in the one-time reclassification of a number of deficient bridges as nondeficient. This reclassification was developed in coordination with State highway officials. The long-term rate of improvement in the Nation's bridge inventory is expected to follow historical trends, and settle out to about 0.4 percent yearly by 2003.

Analysis of the data reveals steady progress in reducing the number of structurally deficient bridges, but a general upward trend in functional obsolescence (disregarding the drop between 1996 and 1997 due to criteria changes). Geometry and capacity influence bridge functional obsolescence. When a bridge width or load carrying capacity is insufficient for the traffic carried, the bridge is functionally obsolete. The slight increase in functional obsolescence is partially explained by the number of interstate bridges in the inventory that are beginning to become deficient. The FHWA will focus research and technology innovations on ways to make

transportation investments buy more and last longer.

In order to meet our objectives for pavement and bridge improvements, FHWA will leverage research to foster major advances in the technology of road and bridge construction, repair and maintenance. FHWA technology deployment initiatives will ensure that current advancements such as SUPERPAVE and high performance materials (composites), as well as high performance steel and high performance concrete are adopted to improve the performance of highways and bridges. The pavement and bridge management systems will enhance the ability to assess, maintain and improve the condition of pavements and bridges.

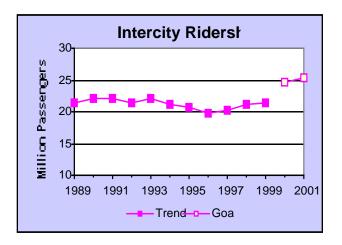
In 1999, solicitation packages were sent to the FHWA field offices requesting assistance in identifying candidate bridge projects for the construction portion of the Innovative Bridge Research and Construction program. Applications were received from 50 percent of the States. In 1999, funds were provided for 56 projects in 40 different States. These projects were selected based on their potential to demonstrate the application of innovative material technology in bridge construction.

In FY 1999, Discretionary Bridge Program candidates were solicited from all of the States for FY 2000. Fortyseven applications were received, from 24 States, with a total requested amount of funding of \$934 million; \$108 million was actually allotted. For FY 2000, \$87.1 million was available for the Discretionary Bridge Program. Ten

candidates were selected for funding; of these, two were seismic retrofit projects.

The American Association of State Highway and Transportation Officials (AASHTO), in cooperation with FHWA, continued the VIRTIS project to develop software to load-rate bridges. The initial modules for steel bridge and pre-stressed and reinforced concrete bridge assessment were completed. The integration of VIRTIS and PONTIS will assist States in planning the systematic preservation, management and improvement of bridge conditions.

AMTRAK RIDERSHIP



Performance Measure: Amtrak and intercity ridership, millions of passengers.

2001 Goal: 25.3

2000 Goal: 23.7

1999 Goal: N/A

1999 Performance: 21.5

Amtrak's rail passenger service helps to reduce highway and aviation congestion in many areas of the U.S. It can help decrease the need for more highway and aviation infrastructure, reduce air pollution and decrease our use of energy resources. But passenger rail service is capital intensive, and the many public benefits cannot be fully captured in individual rider fares. Ridership growth is a key component in achieving Amtrak's financial viability.

Amtrak is a for-profit corporation. DOT must work to ensure that Amtrak balances the conflicting pressures of generating short-term cash, long-term revenues and restoring Amtrak's aging infrastructure. Outside of the Northeast Corridor (NEC), commercial railroads own both rights-of-way and operating systems. This can create problems in achieving on-time performance (and customer satisfaction) on lines congested by freight trains.

Although the FY 1999 goals for trip time between New York and Boston, on-time arrivals and customer satisfaction were not met, ridership levels rose significantly marking the third consecutive year of impressive increases for Amtrak. The performance is especially encouraging, as it relates to future traffic growth, because it occurred during a year when train schedules were cut back to accommodate heavy construction associated with the completion and testing of all components of electrifying the New Haven, Conn./Boston, Mass. portion of the NEC. Amtrak started all-electric operations on January 31, 2000. With this critical step accomplished, Amtrak can now concentrate on the completion of all tests of the new high-speed Acela

trainset. Failure to achieve the three-hour trip time goal in FY 1999 was primarily caused by the inability to complete testing and delivery of the Acela highspeed trainsets. It is now expected that high-speed all-electric operations with the Acela trainsets will begin during the summer of 2000.

Amtrak system-wide on-time performance was 78.5 percent for FY 1999, slightly below the FY 1998 level of 78.6 percent. This did not meet the FY 1999 goal of 87 percent on-time performance. Extremely bad weather and added freight congestion were contributing factors in not meeting the target.

Amtrak directly controls train operations only on the NEC (Washington, DC to Boston, MA), the most significant market under 400 miles. For the remainder of its markets, those under and over 400 miles, train operations are controlled by the freight railroads that own the rights-of-way. On these lines, Amtrak trains are sometimes delayed by normal freight train operations and less often by emergencies relating to freight operations. These events are outside of Amtrak's control. To successfully reach its goal of on-time performance, the most important factor will be the performance of long distance trains. Amtrak and the freight railroads are working together to improve service.

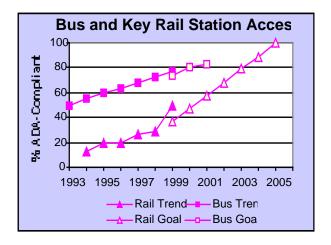
On a system-wide basis, Amtrak reported a Customer Satisfaction Index (CSI) of 82 for FY 1999. The CSI is partially influenced by Federal investment in the fixed plant, as well as by renewed management focus on providing superior services.

Among Amtrak's three Strategic Business Units (SBU), the most improved customer satisfaction has been in the NEC with a five-point gain in 1999 from 1998. Because NEC traffic accounts for over one-half of Amtrak's total ridership, improvements in its CSI bolster system-wide performance. Planned upgrading of NEC services beginning in early 2000, particularly high-speed all-electric operations between New York City and Boston and the deployment of new trainsets throughout the corridor, will help ensure that recent trends in the corridor's CSI will continue.

A total of 332 intercity and commuter trains were scheduled along the most congested segments of the Washington/Boston corridor in 1999. Amtrak and the commuter agencies operating on the NEC continue to make satisfactory progress in undertaking the infrastructure improvements necessary to accommodate the projected growth in the use of the NEC main line. FRA does not anticipate any problems in achieving the 2005 goal of 365 trains per day.

In FY 1999, Amtrak invested \$150 million in the rehabilitation of coaches and locomotives and the purchase of new equipment. These investments will combine to make train operations more reliable on the corridor, and reduce the frequency of equipment failure throughout the Amtrak network.

TRANSPORTATION ACCESSIBILITY



Performance Measure: Percentage of bus fleets that are ADA-compliant.

2001 Goal: 83

2000 Goal: 80

1999 Goal: 73

1999 Performance: 77

Performance Measure: Percentage of key rail stations that are

ADA-compliant.

2001 Goal: 58

2000 Goal: 47

1999 Goal: 37

1999 Performance: 49

Transportation can be vital in maintaining independence for people with disabilities. However, despite important progress toward accessibility, transportation remains a major obstacle to employment and participation in the community for many people with disabilities. The Americans with Disabilities Act (ADA) requires that public transportation services must be accessible to individuals with disabilities, and DOT has set a goal which is more ambitious than the statutory requirements of ADA.

As the population ages, more people will require accessible public transit. DOT provides grants and technical assistance, but State and local agencies decide how to best allocate these resources to ensure ADA compliance.

In 1999, 77 percent of the transit bus fleets were ADA-compliant, compared to 72 percent in 1998. This exceeded our goal of 73 percent for 1999. ADA compliance is measured by the number of lift- or ramp-equipped buses in the fleet.

Funding provided in TEA-21 helped to continue the trend of increased accessibility of the transit bus fleet. The fleet becomes more accessible as older vehicles are replaced. But recently, the rate of increase in fleet accessibility has slowed because many of the buses bought in 1999 replace buses that were already lift-equipped. In the future, as a result of production capacity limitations and the trend toward increased emphasis on bus facilities (other than buses), we expect that additional TEA-21 funding will have only a modest effect on fleet age. Currently, some of the major bus

manufacturers have a backlog of three years.

There are a total of 689 key rail stations nationwide at 33 transit properties. A "key station" is one designated as such by the commuter authority or light/rapid rail operator in conjunction with the disability community. Criteria for identifying key stations include: number of passenger boardings; whether or not the station is a transfer station, a major interchange point or an end station; and, whether the station serves major activity centers. In FY 1999, 340 or 49 percent of key rail stations were ADA-compliant which exceeded our goal of 37 percent, or 254.

The 1998 FTA Voluntary Compliance Agreement (VCA) initiative, the establishment of quarterly key rail station status reporting and continuing key rail station assessments have significantly increased the number of fully compliant key rail stations during FY 1999. A VCA is a written agreement between FTA and the grantee, representing a commitment to reach compliance following an agreed upon schedule with milestones.

The ADA of 1990 required that key rail stations be accessible by July 28, 1993. However, the regulations (49 CFR 27.125) implementing this legislation allowed the transit provider, in certain circumstances, to obtain a "time extension" granted by the FTA Administrator to come into compliance. ("Time extensions" could be granted up to 2020 for extraordinarily expensive structural modifications following the procedures set forth at 49 CFR 37.47 (c) and were very judiciously granted by the FTA Administrator following ADA

Review Board recommendation for approval.)

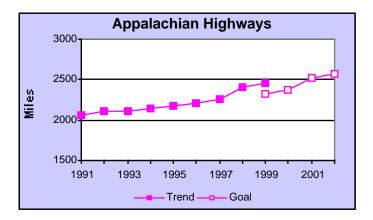
FTA developed VCAs for those key stations not in compliance by the July 1993 date and not meeting the regulatory criteria for a "time extension.")

Because some of the initial VCA and time extension dates were not met by grantees, a new VCA Initiative with stronger sanctions for not meeting the scheduled milestones was put in place with the goal of bringing all key stations into compliance by 2005. Under this new VCA Initiative, failure to meet the compliance dates set in the Agreement will result in referral to the Department of Justice.

Key station assessments are another important part of FTA's ADA oversight effort. Over 358 individual stations have been subject to assessment since 1995. These assessments are conducted by engineers who measure and record data and provide technical assistance on-site, at each of the designated key stations.

FTA's assessment of key stations serves as a check on the certification process and may have the short-term result of actually reducing the number of stations that are certified as ADA-compliant. However, these efforts allow us an opportunity to assist transit properties, and provide the technical guidance needed by them to ensure that stations certified as ADA-compliant are actually in accordance with the compliance standards.

APPALACHIAN HIGHWAY SYSTEM



Performance Measure: Miles of ADHS completed.

2001 Goal: 2530

2000 Goal: 2373

1999 Goal: 2327

1999 Performance: 2456

The economic condition of the Appalachian Region, comprising areas within 13 states, has historically lagged far behind the nation as a whole. Growth depends on overcoming the Region's isolation and providing this underserved area with adequate infrastructure. In 1965, the Appalachian Regional Commission (ARC) was established to help develop the Region, and it runs the Region's highway program. Congress has authorized a 3,025-mile system for Appalachia — the Appalachian Development Highway System (ADHS) — to provide a modern system of fourlane highways. Approximately 80 percent of this system is complete or under construction.

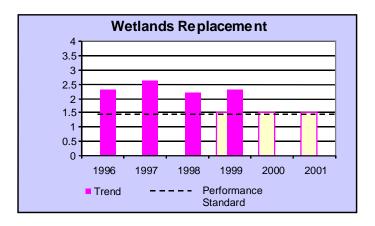
The ARC has responsibility for all decision-making functions of the Appalachian highway program. The most expensive and difficult miles remain to be built.

At the end of 1999, 2.456 miles of the ADHS was completed. This exceeded the goal of completing 2,327 miles by 129 miles.

In May 1999, an Intermodal Summit was held in Lexington, Ky. and an Appalachian Coordinator's Workshop was held in November 1999. FHWA distributed guidelines implementing TEA-21 changes to all division and State DOTs. The FHWA and ARC staff met with each FHWA division office and State DOT in States with ADHS mileage to discuss the ADHS program and visited selected construction sites.

HUMAN AND NATURAL **ENVIRONMENT**

WETLAND PROTECTION AND **RECOVERY**



Performance Measure: On a program-wide basis -- acres of wetlands replaced for every acre affected by Federal-aid Highway projects (where impacts are unavoidable).

2001 Goal: 1.5

2000 Goal: 1.5

1999 Goal: 1.5

1999 Performance: 2.3

Wetlands are an important natural resource. They provide natural filtration of pollutants, and they store and slow down the release of floodwaters, thereby reducing damage to downstream farms and communities. Wetlands also provide an essential habitat for biodiversity. But

many of the nation's wetlands have been lost to development over the years, before their value was fully recognized. Highways and transportation facilities (siting, construction and operation) can be a significant factor affecting these ecosystems.

Wetland impacts are sometimes unavoidable, particularly in construction of bridge crossings. In addition, projects on existing alignments can cause wetlands degradation that is impractical to avoid. In areas where the concentration of wetlands is high southern bottomlands, Midwestern prairie potholes and eastern pine flatwoods — transportation projects often must cross wetlands to provide accessibility to the area.

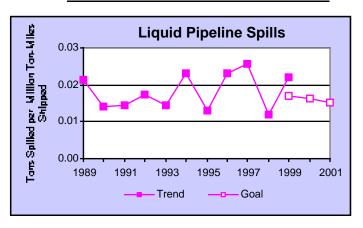
Federal-aid Highway projects avoid impacting wetlands wherever possible. Where wetlands impact was unavoidable, projects achieved an average replacement ratio of 2.3 to one for every acre affected in 1999. This exceeded DOT's performance standard of 1.5 to one.

In 1998, a preliminary study was completed to identify those Federal-aid highway projects demonstrating exemplary practices in characterizing, protecting and restoring important habitat and ecosystem linkages, including wetlands. Many of the best practices were part of successful, ongoing efforts to protect wildlife populations, habitat and ecosystem integrity. Based on this study, a report was issued in 1999 providing guidance on assessing ecosystem impacts.

Recent estimates of total wetland loss indicate that, between 1982 and 1992, approximately 160,000 acres of wetlands per year were being converted to other land cover types by all sources of impacts. During that same period, only about 75,000 acres of wetlands were being restored or created each year — a deficit of about 85,000 acres per year. After 1992, an additional 68,000 acres per year have been restored or established as the result of the Wetlands Reserve and other new wetland conservation programs. FHWA programs contributed an average of over 4,000 acres to this annual total between 1996 and 1999.

The actual replacement ratio for highways represents about three percent of the estimated total nationwide wetland replacement rate — most of which comes from restoration of agricultural lands. These ratios suggest that the project eligibility and funding provisions for wetland mitigation in the **Intermodal Surface Transportation** Efficiency Act of 1991 (ISTEA) have been effective in enhancing the natural environment. Those provisions, now continued in TEA-21, are important to maintaining this trend into the future, and should be effective in accomplishing the Nation's environmental goals.

HAZARDOUS MATERIALS SPILLS



Performance Measure: Tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines.

2001 Goal: .0151

2000 Goal: .0161

1999 Goal: .0171

1999 Performance: .0229

More than 616 billion ton-miles of petroleum and other hazardous liquids move across the country by pipeline. While this is usually the least costly way to transport these bulk cargoes, it also entails some risk. Because of the volume of liquid hazardous material moved by pipelines, any spill into the environment is potentially a significant one.

Prevention and mitigation of pipeline spills requires improved site-specific knowledge of water and sensitive environmental areas to provide tailored actions to first prevent leaks, and, if they do occur, assure that appropriate and timely response is undertaken.

Neither of the 1999 goals for hazardous materials (pipeline and non-pipeline) spills was met. In 1998, the spill rate for pipeline hazardous liquid materials reached a ten-year low of .0118 tons per million ton-miles shipped. In 1999 the spill rate rose compared to the 1998 level but may have simply returned to the previously expected level in line with the trend throughout the 1990s. The data oscillates over time with a general downward trend. Because there is a high degree of variability in the data, we will closely examine the performance of the

measure over time to validate the merit of this measure in its current form. Because we did not reach our 1999 goal for this measure, we are analyzing the data on hazardous material spills to identify target areas where further improvements might be made.

The average spill size of hazardous liquids transported by means other than pipeline was 2,237 gallons in 1999 — 9.3 percent higher than RSPA's goal of 2,046. The average amount released per incident by mode is air, one gallon; highway, 1,678 gallons and rail, 6,261 gallons. One third of the total material released in serious transportation incidents is attributed to just six incidents. Discounting these six incidents, the average spill size for the remaining serious transportation incidents is 1,536 gallons, well below RSPA's goal. These results remain in line with general trends over the 10-year period and reflect the variability of incident consequences.

1999 activities included a pilot test of the new American Petroleum Institute (API) voluntary industry pipeline information system, created with joint industry/State/Federal input and participation. The API voluntary information system will provide data on much smaller spills than captured by the current threshold for federal spill reporting, providing better trending information, information about precursors to leaks and better information about the impacts to the environment and the effectiveness of remediation efforts.

The Office of Pipeline Safety (OPS) continued to work closely with the Coast Guard and the Environmental Protection

Agency (EPA) in implementing the Oil Pollution Act of 1990 as it applies to onshore oil pipelines. Efforts are aimed at decreasing the likelihood of pipeline spills, diminishing the environmental consequences of spills and ensuring that the responses to spills are swift and well planned. Operators are required to develop response plans, test their plans in exercises and implement their plans in actual responses.

RSPA also worked in 1999 to increase awareness of one-call centers to reduce excavation damage to pipelines. Another effort that contributed to reducing the impact of spills on the environment is RSPA's work to define and identify areas unusually sensitive to environmental damage. By identifying where spills have the most potential for costly impact to the environment and consequently targeting efforts to improve structural integrity in those areas, we maximize resources spent in making system improvements.